

# Hidden Dangers of Ultra Processed Foods

By Sonya Collins

Feb. 21, 2020 -- At his heaviest, Steve Konzelman weighed 503 pounds. His blood pressure had reached 180/140. (Normal is 120/80 or lower). His doctor told him he could have a stroke at any moment. He was in his 20s at the time. "Even then, I still didn't take my medication," he says.

Steve Konzelman lost almost 300 pounds in part by giving up ultraprocessed foods. Konzelman, whose mother, brother, and late father struggled with obesity, too, had looked into weight loss surgery several times. But, he says, "I just always felt like I could still do it on my own."

As he neared 30, though, he knew he needed help. So he finally moved forward 4 years ago at age 29. Doctors had warned him that gastric bypass surgery, which reduces how much the stomach can hold and the amount of calories and nutrients the body absorbs, had a very high fail rate.

"It doesn't fix your life. It's only a tool. I had to go into it fully committed," says Konzelman, an operations analyst at Bank of America in Atlanta. He knew he'd lose weight rapidly over the first 6 months. But in order to keep the weight off, he'd have to change everything. That meant giving up the calorie-rich and nutrient-poor ultra-processed foods that were a staple of his diet.

"I was the stereotypical fat American," he says. "I'd hit up a fast-food drive-thru in the morning and get two breakfast sandwiches and two hash browns and a 40-ounce soda. Then, after having all my calories for the day in one meal. I might do it again at lunch and dinner."

Those kinds of ultra-processed foods -- which include ready-made snacks, drinks, and meals that contain additives, artificial colors, preservatives, and plenty of sugar, salt, and fat but very little nutrition -- account for up to 60% of some people's diets. Recently, this subset of processed foods has become the focus of blame for ailments including heart disease, diabetes, obesity, some cancers, and an overall shorter life.

## What is Ultra-Processed Food?

Unless you make all your food at home from scratch -- and even then -- processed food is practically unavoidable. But there are degrees of processing.

Minimal processing cleans food, preserves it, or removes inedible parts -- like the outer skin of a coffee bean as it's ground. Besides grinding, these processes include refrigerating, freezing, fermenting, pasteurizing, and vacuum-packaging. The key to keeping it minimal is that the nutrition content of the food is still pretty much the same. Whole-grain flours and pastas are also minimally processed foods, as well as some cooking ingredients. Think oils pressed from nuts, olives, or seeds.

## Are Processed Foods Bad?

Is it best to avoid processed foods altogether? Here's how to make healthier food choices.

Once you add sugar, salt, or fats to the mix, processing is no longer "minimal." Canned fruits and vegetables that include added salt or sugar are processed. So are fresh-baked bread, some cheeses, and canned fish. Still, they're not ultra-processed. Their ingredient lists are limited to two to three items, but they are typically ready to eat (or at least edible) right out of the package.

Ultra-processing includes multiple steps -- not just, for example, adding salt and canning. The process also brings in ingredients -- usually with unrecognizable names -- that you wouldn't find in a crop or on a farm. They include artificial colors and flavors, preservatives, and ingredients, such as emulsifiers, meant to make the look or texture of the food more appealing.

Sodas, luncheon meats, sugary cereals, and chips are ultra-processed, along with many other packaged snacks and baked goods, some frozen meals, and some crackers.

"You're introducing ingredients that shouldn't be there in the first place, that don't naturally exist in food and instead are brought in purely by human preparation," says Qi Sun, MD, ScD, an associate professor of nutrition at Harvard University. "You basically destroy the structure of the food and reorganize it -- introducing a new food matrix."

Food matrix? That's a food's structure. It's not only a food's components -- say, vitamin C and fiber -- that make it nutritious. It's also the food's structure. That means that even if an ultra-processed food contains certain vitamins and nutrients, it still wouldn't be as nutritious as a whole food. That's why, for example, a high-fiber whole food is better for you than, say, a fiber pill.

### What's the Harm in Ultra-Processed Foods?

Research links ultra-processed foods to a number of health problems. People who eat more of the stuff are more likely to be obese, and have diabetes, heart disease, and vascular disease (that includes stroke), too.

One recent study even tied the convenience foods to cancer risk. Researchers tracked the eating habits and health records of 104,980 adults for 5 years. Those who ate the most ultra-processed foods were most likely to get some form of cancer over the study period. The researchers then looked at cancer risk based on average number of servings per day over the 5 years. For each 10% increase in ultra-processed food intake, there was a 12% increase in overall cancer risk. That's the difference between someone who eats one whole Twinkie per week for 5 years and someone who eats one whole Twinkie plus one bite of another one per week over the same time period.

Maybe it's because of the risk for these diseases that studies also show eating more ultra-processed foods equals living a shorter life.

Experts can't say for sure whether the harm in ultra-processed foods is in what these foods contain or what they lack. "It's probably both," says Sun. "Certain chemicals, preservatives, sweeteners -- even the ones that don't have any calories -- may potentially interfere with metabolism. We know these foods are not good for us, but there's also a lot we still don't know."

And if you're snacking on processed foods, you're doing that instead of eating, say, an apple.

"A diet that contains more ultra-processed foods may contain fewer whole foods, so it may be the lack of those foods that's most harmful," says Katherine Zeratsky, a registered dietitian nutritionist at Mayo Clinic in Rochester, MN.

Ultra-processed foods, though not all of them, tend to be low in fiber and other essential nutrients. If these snacks take the place of whole foods in your diet, you'll miss out on those nutrients and could see the health consequences that go with that. Protein and fiber, for their part, help you feel full, which means foods that contain these nutrients may help you control calorie intake throughout the day.

Some studies find that ultra-processed foods, regardless of their nutrient content, don't satisfy as well as whole foods do.

That could explain the results of a recent experiment. In the study, 20 healthy adults stayed in a lab under close surveillance for 28 days. Ten of them received a diet of mostly ultra-processed foods, including white bread, lunch meats, cheese slices, chips, and artificially sweetened diet drinks. The other 10 received the exact same amount of calories, sugars, fiber, fat, and carbohydrates per meal, but only in the form of unprocessed and minimally processed foods. They ate things like beef tips with broccoli, brown rice, apples and salad. (Note: It takes a lot of broccoli and apples to match the calories in a bowl of potato chips). The study participants could eat only the food that was provided, but they didn't have to clean their plates. At the end of the 4 weeks, those in the ultra-processed group had eaten about 500 calories per day more than the others. And they had gained 2 pounds, while the others had lost 2.

Were the processed foods not as filling? Or were they just tastier, making it harder to stop? The researchers don't know for sure why people ate substantially more of the processed stuff. But, either way, the ultra-processed foods led to overeating and weight gain.

As for Konzelman, he always found that processed foods were more satisfying. "I liked to cook and had a taste for vegetables and homecooked meals. I just didn't do it very much because those foods didn't fulfill and satisfy me as much as take-out fast food."

### How Do You Quit?

On his extreme weight loss journey, which got him from 503 to 218 pounds, Konzelman transformed from a guy who'd eat a whole pizza and a 2-liter soda for dinner to one who brings his own homemade salad dressing when he goes out to eat in restaurants. "I wanted a salad dressing that wasn't filled with sugar and all kinds of artificial ingredients," he says.

And, with his stomach's restricted capacity for food and his body's limited ability to absorb it, there was no room for empty calories. "Now that I was only eating a small amount of food, I had to make sure that it was filled with the nutrients that I needed."

### What Is Processed Food?

You can't really avoid it, and that's not necessarily a bad thing. Processed food is food that's changed in any way from its natural state. That includes washing, canning, freezing, or adding ingredients to it. Baking, cooking, or preparing it counts as processing, too.

Canning or freezing some fruits and vegetables can help them stay fresh for a long time. Pasteurizing milk and cheese lengthens their shelf life. Similarly, vacuum-packing can keep meat from spoiling. All of these also help cut down on waste.

### Benefits: Healthy Eating

Washing and bagging vegetables like lettuce and spinach makes them easier to prepare and eat. Canning fruits in water or their own juice locks in freshness and nutrients. Added ingredients like fiber, calcium, and vitamin D can also make some foods better for you.

### Other Healthy Processed Foods

In addition to fruits and vegetables, other processed foods that can be part of a healthy diet include tuna and salmon in cans or ready-to-eat pouches, yogurt, cottage cheese, and roasted nuts.

### What Is Heavily Processed Food?

Heavily -- or ultra -- processed foods have unhealthy ingredients added to make them more appealing or make them last longer. Those ingredients include things like salt, sugar, artificial colors, flavorings, and preservatives. One study found that ultra-processed foods make up about 60% of the calories in the American diet.

### Unhealthy Processed Foods

The worst processed foods for your diet are typically ready-to-eat and low in nutrients. They include cookies, sugary drinks, deli meats, and frozen pizza, salty snacks like chips, and most breakfast cereals. These foods may taste good, but they're loaded with added ingredients that aren't good for you.

### What to Watch For: Sodium

Sodium is often used to keep food fresh. Even if you're careful about adding it to your food, it's probably already there, thanks to processing. Americans get close to 70% of the salt they eat from processed food and restaurant food.

### How to Keep Sodium in Check

You can control how much sodium you get by simply reading labels. Look for ones that say no sodium or reduced sodium. Anything with more than 600 milligrams of it per 100 grams of serving size is considered high, while 300 milligrams or less is low. Keep in mind that sodium can also go by different names, like monosodium glutamate or disodium phosphate.

### 'The Salty Six'

Be especially careful with these foods:

**Pizza:** One slice with lots of toppings can give you half your suggested daily amount of salt.

**Bread and rolls:** Even if there's not a lot in one piece of bread or one roll, it can add up if you eat bread often.

**Sandwiches:** One fast-food sandwich or burger can give you your total daily amount of salt.

**Cold cuts and cured meat:** It takes about 6 thin slices to get half your recommended daily amount.

Canned soup: One cup can have half the salt you need for the day.

Burrito and taco fillings: These meats and cheeses can be loaded with salt.

### What to Watch For: Sugars

Like salt, sugar is commonly added during processing. It's used to make foods taste better or improve texture. It shows up in things you'd expect, like cereal and baked goods. But it can also be in things like pasta sauce. Almost 90% of added sugar in Americans' diets comes from highly processed foods.

### How to Keep Sugar in Check

As with salt, you can control how much sugar you get by reading labels. For a 2,000-calorie diet (a typical adult diet), you should aim for less than 48 grams of added sugar each day. Check the ingredients, too. Certain ones should give you pause. These include corn syrup, high-fructose corn syrup, honey, agave nectar, cane sugar, evaporated cane juice, coconut sugar, dextrose, malt syrup, molasses, and turbinado sugar.

### What to Watch For: Trans Fat

Found in processed foods like baked goods, salty snacks, and margarine, trans fat can affect your cholesterol and lead to inflammation that's linked to heart disease, stroke, and other conditions. Recent government rulings have made trans fat increasingly difficult to find, but read labels: More than 5 grams per 100 grams of serving size is high. Also know that even if a product's label says it has 0 grams of trans fat, it can have up to 0.5 grams of it.

### Cooking at Home

Preparing your own food lets you decide the ingredients and the amounts of them that go into it. If you don't have the time -- or the skills -- for that, frozen meals aren't necessarily as bad as they once were. While these are still processed, some food companies are using fewer unhealthy ingredients in them. It's still important to read the labels, but they aren't all bad for you.

### Tips for Eating Out

While you don't have as much control as you would at home, you can do some things to avoid ultra-processed food when you're out. For example, you might ask your server which dishes are made at the restaurant and not brought in prepackaged. You could also request bottled dressings, sauces, or condiments on the side.

Konzelman emphasizes that he didn't go from whole pizza to make-your-own salad dressing overnight. When he first started preparing small, healthier meals at home, he'd cook vegetables, but he'd still throw in an ultra-processed sauce or marinade. Little by little, he learned about healthier ingredients he could swap in to replace the less healthy ones.

And that's the right idea, Zeratsky says. Look for the low-hanging fruit. Are there a couple of ultra-processed foods in your regular diet that you could swap out for something else? "You could start by cutting back on ultra-processed foods at snack times," she says. "Cut some of the chips or cookies and replace them with apples and peanut butter or vegetables with hummus."

Dietitians and food industry professionals alike warn that it's not about replacing one junk food with another seemingly better one. Don't be swayed by labels on ready-to-eat convenience foods, like chips and cookies, that read "natural" or "organic." You're still likely to find unrecognizable words among the ingredients.

"It's not always that much different -- the so-called cleaner versions," says David Foerstner, a food product development consultant.

Even buzzwords like "plant-based" don't mean it's as healthy as a whole food. "All this stuff they've got in plant-based protein would still fall under ultra-processed foods," says Michael Sigmundsson, a food and beverage product developer and consultant.

The ideal choice is whole, unprocessed, or minimally processed foods. Any movement toward more of those and less of the other is a positive change. It doesn't mean you suddenly have to make everything from scratch.

“If you need a convenient meal, can you get a bagged salad? Or pick up a whole cooked chicken or frozen vegetables that you can heat up?” Zeratsky says. “Because I don’t think we are ever going to have a lifestyle that isn’t time-crunched and that doesn’t demand convenient foods.”